

Topic: Selection of a final remedy for the San Jacinto Waste Pits Superfund Site.

Background:

- In the mid-1960s two sand mining pits on the banks of the San Jacinto River were filled in with pulp and paper mill sludge that contained high concentrations of dioxins. The pits are located 15 miles east of downtown Houston at the Interstate 10 bridge over the San Jacinto river. The southern pit was covered with 3 feet of fill and is now the location of a barging operation. The northern pit was covered with soil and formed a peninsula into the river. It was undeveloped and became a popular fishing, crabbing, and picnicking spot.
- Dioxins are ubiquitous in the San Jacinto River (the entire watershed) from a variety of industrial and anthropogenic sources, but the fingerprint of dioxins/furans in the waste pits is unique.
- The entire Galveston Bay system, which includes the San Jacinto River, has a health advisory to limit consumption of seafood due to dioxin and PCBs.
- Over the past 50 years, land along the San Jacinto river has subsided partially submerging the northern waste pit.
- In 2007, the Texas Parks department discovered exposed sludges emerging from erosion at the northern pit. The community became extremely alarmed when it was found that the sludges contained high levels of dioxin.
- In 2008, EPA added the site to the National Priorities List. Texas Department of Health Services issued fish consumptions advisories for dioxin, PCBs, and other contaminants. Galveston Bay and the San Jacinto River has pollution from hundreds of industries including this site.
- In 2009, EPA issued orders to the PRPs (International Paper Company and McGinnes Industrial Maintenance Corporation) to conduct a Remedial and Feasibility Study of the site, and to cover the northern pits with a temporary cap until a remedy was selected by EPA.
- In 2011 PRP's installed temporary cap on the northern pit consisting of a synthetic blanket covered by up to 2 feet of rock.
- In 2012, 2013, and 2015 PRPs repaired the temporary cap to correct problems from erosion and/or improper construction
- At the end of 2015, the EPA R-6 dive team inspected the site and found that an 20 by 20-foot area of the temporary cap exposed to the river. PRP's responded to EPA's direction to immediately correct the problem. The community, local governments, and the media voiced strong objections about the lack of a final decision.
- In 2016 EPA learned that an 8-foot-deep gouge in the riverbed sediment adjacent to the cap had been created by spring floods. Based on these events EPA took over the writing of the Feasibility Study from the PRP's and developed a Proposed Plan that was reviewed by OSRTI, OSRE, the Remedy Review Board, and the EPA Sediment Workgroup.
- On September 16, 2016, EPA issued a Proposed Remedy for public comment. The proposed remedy called for the excavation and offsite disposal of wastes at a cost of \$97 million. A variety of other alternatives (including leaving waste in place under an enhanced cap for \$24.7 million) were eliminated because they wouldn't be permanent for hundreds of years needed in this dynamic river system.
- On January 12, 2017 the public comment period closed. EPA received 7,000 comments (94% in favor of the proposed remedy), petitions asking for excavation from 48,000 people, and 3,000 pages of technical comments. Region 6 has drafted responses to over 400 different comments in consultation with experts at the Corps of Engineers and the US Geological Survey.

Issues:

- Dredging vs Excavation: The PRP's and a number of citizens living downstream of the site were concerned that dredging would inherently stir up dioxin-laden sediments. The proposed plan is based on using sheet piles to eliminate the need for dredging. The Corps of Engineers has advised EPA that caissons may be better than sheet piles to ensure that no dredging would be needed. This would increase the total cost of the remedy from \$97 million to \$115 million.
- Impermanence of Onsite Disposal: EPA based rejection of on-site disposal options based on several lines of evidence: a dynamic river environment evidenced by the creation of gouges in the river and subsidence; heavy commerce with large barges that could strike the cap; and, modeling by the Corps of Engineers that showed that 80% of the northern pit could be exposed by a major storm. The PRP's disagree with this assessment; argue that the model was not run for an enhanced cap; and, indicate that they could not reproduce the Corps modeling results. The Corps has since re-run their model several times and confirm that similar results of destruction are predicted for the enhanced cap. In addition, the USGS geomorphology experts evaluated the instability of the site.
- Response to Hurricane Harvey: The responsible party mobilized to the Site as soon as the floodwaters receded and began operations to assess the cap and to effect repairs by replacing rock that had washed away. EPA has thoroughly inspected the areas that are not inundated and is using the EPA Dive Team to inspect the underwater portion. EPA contractors will be collecting samples from the site to confirm that no waste was exposed during the week of 11 September.
- *Preliminary sampling data will be available soon. We will update verbally on Friday.*

Recommendations:

- Region 6 will meet with the PRP group to discuss the results of the Corps modeling and resolve disagreements on the assessment. Develop a path forward with the PRP to implement the proposed remedy expeditiously.
- Region will provide additional briefings in the near future, if acceptable we will recommend that the Administrator sign the ROD before December 2017 (Scope of the remedy will depend on the decision by Administrator).
- Implement the enforcement instruments for the PRP to carry out the work. The duration of the enforcement will depend on a consent versus a unilateral process.
- The engineering phase required to implement the work is extensive and will require several months prior to on-site construction.

Topic: Status of Hurricane Harvey Response at the US Oil Recovery Site, Pasadena, Texas

Background:

- The Site consists of two separate properties which are located in Pasadena, Texas, north of Highway 225. USOR operations at the 400 N. Richey Street property included receipt of municipal and industrial wastewater, characteristically hazardous waste, used oil and oily sludges, as well as municipal solid waste. Its affiliate, MCC Recycling (MCC), conducted associated operations at the 200 N. Richey Street property, which was a former sewage treatment plant owned by the City of Pasadena from approximately 1945 until it was acquired by USOR in January 2009.
- As part of the initial response actions, the EPA took steps to contain off-site migration, mitigate the threat to the public and to Vince Bayou, and stabilize the Site in July 2010, November 2010, and January 2011. As part of those efforts, contaminated storm water and hazardous sludges were transported off-site.
- Pursuant to an AOC dated August 25, 2011, the EPA has continued to overseeing subsequent Site stabilization activities performed by the PRP Group. The PRP Group obtained a Court-appointed Receiver with legal custody and control over the Site. The Receiver's role is to assist the Group in its performance of the EPA- approved actions at the Site.
- PRPs signed Order in 2015 to conduct the Remedial Investigation at a portion of the Site. Negotiations are on-going for the wastewater treatment plant portion of the Site.
- The current investigation activities started in May 2016, and includes soil, sediment and groundwater investigations.
- The Record of Decision is currently scheduled for 2021.

Issues: Response to Hurricane Harvey

- The responsible party mobilized to the Site as soon as the floodwaters receded and began operations to remove excess storm water from open tanks from the former waste water treatment plan. The water is removed via vacuum truck and taken off-site for disposal. Sampling has been conducted to characterize the storm water, and soil samples have been collected around the tanks. Fencing has been repaired and equipment repairs have been conducted to ensure site stability. EPA has conducted site inspections and provides oversight of the response actions.
- *Preliminary sampling data will be available soon. We will update verbally on Friday.*

Recommendations:

- Continue oversight of response operations by the responsible party.
- Transition to normal site operations when response is complete, resume site investigation.

Topic: Status of Hurricane Harvey Response at the Brio Refining Superfund Site Friendswood, Texas

Background:

- This 58-acre site is located 20 miles south of Houston in southern Harris County, Texas. The Site was used as a chemical re-processing and refining facility from the 1950's to 1982. A neighboring residential subdivision (now abandoned and the homes removed) was located along and north of the northern boundary of the Site. Mud Gully, a flood control ditch, runs along the western boundary of the site.
- Chemical disposal practices contaminated groundwater, surface soils and subsurface soils with hazardous chemicals. The final remedy included containment including a vertical barrier wall, site cover, groundwater flow control, long term groundwater monitoring, and channel improvements to Mud Gully. Following cleanup, EPA took the Site off the Superfund National Priorities List (NPL) in 2006.
- The Site is in long-term maintenance by the responsible party. The last 5-year review in 2013 determined the site remedy was still protective.

Issues: Response to Hurricane Harvey

- The responsible party secured the site prior to the hurricane. Although extensive flooding occurred in the vicinity of the site, there was minimal flood waters on the Site cover system. The responsible party entered the Site as soon as flood waters receded and conducted an assessment of damages.
- Aerial analysis was also conducted by EPA using NOAA imagery to assess site conditions.
- Minor site maintenance due to the storm has been completed and the responsible party has resumed normal site operations.
- *Preliminary sampling data will be available soon. We will update verbally on Friday.*

Recommendations:

- Continue normal site operations.